REMARKS

The Office Action dated January 28, 2008 has been received and carefully noted. The following remarks are being submitted as a full and complete response thereto.

Claims 1 and 3-7 have been rejected and are pending in this application. Applicants respectfully request reconsideration and withdrawal of all rejections.

Rejection Under 35 U.S.C. §112

Claims 1 and 3-7 are rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. In particular, the Office Action states that the claimed limitation, "a pressurization means, provided only in the second supply line..." (emphasis added) is not described in the specification in such a way as to reasonably convey to one skilled in the art that the inventors, at the time the application was filed, had possession of the claimed invention.

The Applicants respectfully submit that the specification does indeed provide support for this claimed feature. In particular, page 8, lines 9-24, state that hydrogen gas is stored in the first storage means for supplying hydrogen gas to the first fuel cell without being pressurized and that hydrogen in the second storage means for supplying hydrogen gas to the second fuel cell is pressurized. Moreover, this passage explains that the hydrogen supply unit of the present invention does not perform needless pressurization of the hydrogen gas to be stored, and hence can suppress energy consumption, while quickly providing hydrogen to the second fuel cell.

For at least the above reasons, the Applicants respectfully request withdrawal of the §112 rejection of claims 1 and 3-7.

Rejection Under 35 U.S.C. §103

Claims 1 and 5-7 are rejected under 35 U.S.C. §103(a) as being unpatentable over Fairlie et al. (WO 00/69773, hereinafter "Fairlie") as evidenced by Sircar et al. (U.S. 6,103,143, hereinafter "Sircar"). Claims 3 and 4 are rejected under 35 U.S.C. §103(a) as being unpatentable over Fairlie as applied to claim 1 above, and further in view of JP 10-139401 to Ogino (hereinafter "Ogino"). Applicants respectfully traverse these rejections.

Pages 3-4 of the Office Action state that primary reference Fairlie describes a hydrogen fuel network that may include hydrogen production equipment, hydrogen sequestration equipment, and hydrogen storage facilities (p. 4, lines 21-23). The hydrogen storage facilities may be on the vehicle or at off-vehicle storage sites for later on-vehicle transfer.

The Applicants submit that Fairlie does not teach or suggest that two storage means are both provided in a hydrogen supply unit, as recited in claim 1.
A storage unit typically occupies a large volume within a hydrogen supply unit. When hydrogen is supplied to a plurality of hydrogen supply destinations from the same reformer, a person of ordinary skill in the art would provide one reformer, one purifying means, and one storage means to be used commonly for all destinations. Such person would then distribute hydrogen to each of the supply destinations by branching a plurality of supply lines downstream of the storage means. The Applicants submit that Fairlie is based on this conventional concept and does not teach that two storage means are both provided in a hydrogen supply unit as recited in claim 1.

Further, the Office Action admits that although Fairlie teaches that the network

may have a purifier (p. 5, line 7), it does not teach two separate purifying means, as required by claim 1. For this reason, Fairlie also does not teach the claimed feature that the second storage means stores the hydrogen gas purified by the second purifying means. The Office Action relies on secondary reference Sircar at col. 8, line 67 – col. 9, line 2, for teaching that it is well known in the art that different users of a hydrogen source often require different purities. The Office Action contends that it would have been obvious to one of ordinary skill in the art at the time of the invention to add another purification means in the second supply line to supply a second user with a different purity of hydrogen than that which is supplied to a first user.

The Applicants submit that Sircar at col. 8, line 67 - col. 9, line 2 teaches only that the acceptable amount of impurities (allowable degree of purity of hydrogen) differs depending on the purpose of using the hydrogen. Sircar does not teach changing the degree of purity within the existing hydrogen supply unit. As previously discussed, a person of ordinary skill in the art would provide one reformer, one purifying means, and one storage means to supply hydrogen to multiple hydrogen users. Therefore, when different users require different purities, a person of ordinary skill in the art would purify hydrogen gas based on the higher purity degree request to meet both requests, by using the existing purifier and the existing storage unit. Further, the Applicants submit that Fairlie and Sircar do not provide any suggestion or motivation to have two separate purifying means within one system.

With regard to the rejection of claims 3 and 4, the Applicants respectfully submit that secondary reference Ogino fails to remedy the deficiencies of Fairlie discussed above in reference to claim 1.

In contrast to the presently claimed invention, the hydrogen fuel network of Fairlie is described in general terms and the arrangement and connections between specific network equipment is not provided. As such, Fairlie does not specifically teach having first and second supply lines supplying hydrogen gas from the reforming means to the first and second storage means, respectively, as recited in claim 1. Fairlie also fails to teach that the second supply line begins downstream of the first purifying means. Further, Fairlie does not teach that a pressurizing means is provided only in the second supply line, as claimed. As discussed above, providing pressurization means only in the second supply line improves the efficiency of the hydrogen supply unit.

Having highlighted numerous deficiencies in the cited references, the Applicants respectfully submit that the cited references Fairlie, Sircar, and Ogino fail to teach or suggest at least the features of two storage means provided in the hydrogen supply unit, a second purifying means, that the second storage means stores the hydrogen gas purified by the second purifying means, that a pressurizing means is provided only in the second supply line, and the specific arrangement of equipment in the hydrogen supply unit, as recited in claim 1.

Thus, Applicants respectfully submit that claims 1 and 5-7 are not obvious over Fairlie and Sircar and claims 3 and 4 are not obvious over Fairlie and Ogino. For at least the above reasons, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 1 and 4-7 under 35 U.S.C. §103(a) over Fairlie in view of Sircar and claims 3 and 4 over Fairlie in view of Ogino.

CONCLUSION

Applicants respectfully submit that this application is in condition for allowance and such action is earnestly solicited. If the Examiner believes that anything further is desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephone number listed below to schedule a personal or telephone interview to discuss any remaining issues.

In the event that this paper is not being timely filed, the Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension, together with any additional fees that may be due with respect to this paper, may be charged to Counsel's Deposit Account Number 01-2300, referencing Docket Number 101175-00035.

Respectfully submitted,

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